



UNITED STATES PATENT AND TRADEMARK OFFICE

3

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,583	04/06/2001	Marc Unger	20174-003010US	6679

20350 7590 12/18/2002

TOWNSEND AND TOWNSEND AND CREW, LLP  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER

CHAMBERS, A MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

3753

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/826,583

Applicant(s)  
Unger et al

Examiner  
A. Michael Chambers

Art Unit  
3753



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 32-43 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 32-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 3753

### DETAILED ACTION

1. This application has been examined. This action is in response to a preliminary amendment filed August 28, 2001. This application is a continuation-in-part(C-I-P) of serial number 09/724,784, filed November 28, 2000, pending, which is a C-I-P of serial number 09/605,520, filed June 27, 2000. These application claim benefit from provisional applications 60/141, 503, filed June 28, 1999 and 60/147,199, filed August 3, 1999 and 60/186,856, filed March 3, 2000. Applicants have included an incorporation of an Appendix A "Monolithic Microfabricated Valves and pumps by Multilayer Soft Lithography", Unger et al, Science, Vol. 288, pp 113-116 (April 7, 2000). Applicants are asked to clarify what appears to an incorporation of **this PRIOR ART** (pages 87-90) as part of the specification of the instant application. ? Is it part of the specification or **PRIOR ART** ? If it is part of the specification it is incorrectly inserted as a "typed portion of the specification". The Examiner believes it is **PRIOR ART** and has been applied against the claims. Applicants are asked to update the status of documents on page 86 in response to this Office action. Are these the same documents discussed above ? Information disclosure documents(IDS) LISTINGS ONLY have been filed October 10, 2001, January 4, 2002, May 7, 2002, and August 5, 2002. Applicants are requested to provide a copy of the IDS LISTING filed May 7, 2002. No copies of the documents were included with the LISTINGS(4), many of which are Non Patent Literature Documents, and have NOT been considered. Claims 26-31 have been canceled and claims 1-25 and 32-43 are pending.

Art Unit: 3753

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-25 and 32-43 are rejected under 35 U.S.C. 102 (b) as being anticipated by “Monolithic Microfabricated Valves and pumps by Multilayer Soft Lithography”, Unger et al, Science, Vol. 288, pp 113-116 (**April 7, 2000**), discussed above. Applicants are asked to discuss it’s relevance and the differences between this document and the claims of the instant application in response to this Office action. AND-type-truth table and NOR-type-truth table is deemed to be a function of which channels are opened or closed (i.e., have fluid or do not) and are deemed to determined by the actuation of the particular channel of the fluid logic device of Figure 1 of “Unger et al”.

4. Claims 1-25 and 32-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Holster. AND-type-truth table and NOR-type-truth table is deemed to be a function of which channels are opened or closed (i.e., have fluid or do not) and are deemed to determined by the actuation of the particular channel of the fluid logic device of Figures 1 and 3 (Note the truth table clearly shown in Figure 3 (column 5, lines 11+).

Art Unit: 3753

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Any inquiry concerning this communication communications from the Examiner should be directed to A. Michael Chambers whose telephone number is (703) 308-1016 (FAX (703) 308-7765).

amc  
December 15, 2002



**A. MICHAEL CHAMBERS  
PRIMARY EXAMINER  
ART UNIT 3753**